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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,216	05/12/2006	Masaki Fukumori	Q94896	1179
23373 7590 07/03/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER REDDY, KARUNA P	
			ART UNIT 1713	PAPER NUMBER
			MAIL DATE 07/03/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,216	<b>Applicant(s)</b> FUKUMORI ET AL.	
	<b>Examiner</b> Karuna P. Reddy	<b>Art Unit</b> 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/12/2006, 6/27/2006</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 8 is objected to because of the following informality: Claim 8 recites ".... contains a surfactant which consists of a nonionic surfactant." It is not clear as to whether the surfactant is a mixture that consists of a non-ionic surfactant or the surfactant is a non-ionic surfactant. Appropriate clarification and correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 11 provides for the use of aqueous dispersion, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.
4. Claim 11 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153

USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-5, 7-8, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (US 6, 472, 019 B1) in view of Greenspan et al (US 2, 684, 353).

Yamaguchi et al disclose a treated textile involving the step of applying treatment liquid, wherein the treatment liquid contains a water- and oil-repelling agent (abstract). The water and oil-repelling agent is generally a fluorine containing compound. The fluorine containing compound is a fluorine containing

polymer. The fluorine containing polymer may be a polymer comprising a repeat unit derived from a fluoroalkyl group containing monomer such as fluoroalkyl group containing (meth)acrylate (column 2, lines 22). The fluorine containing polymer may be a copolymer comprising (A-I) a repeat unit derived from a monomer having a fluoroalkyl group, (A-II) a repeat unit derived from vinyl chloride and/or vinylidene chloride and (A-III) a repeat unit derived from a fluorine free monomer (column 7, lines 25-33). Various emulsifying agents such as nonionic emulsifying agent can be used (column 9, lines 43-46).

The prior art of Yamaguchi et al is silent with respect to hydrochloric acid-trapping compound.

However, Greenspan et al teach the stabilization against effects of heat and light in connection with halogen containing polymers generally and polyvinyl chloride in particular (column 1, lines 28-33). As the breakdown of polyvinyl chloride caused by light and heat involves liberation of hydrochloric acid, various types of hydrochloric acid acceptors have been used (column 1, lines 38-40) and reads on the hydrochloric acid-trapping compound of claim 1. One group of stabilizers found commercially acceptable comprises the metal salts of higher fatty acids (column 1, lines 52-54). More recently, epoxy compounds have been recommended as stabilizers particularly in conjunction with metal-organic compounds such as cadmium salt of fatty acids (column 2, lines 10-15). Examples of metal salts of epoxy acids include Mg, Ca, Zn compounds of epoxy acids derived from linoleic, linoleic and soybean oil (column 2, lines 54-55;

column 3, lines 1-12). Therefore, it would have been obvious to one skilled in the art at the time invention was made to add acid acceptor such as, metal salt of an acid or epoxy compounds for the stabilization of water- and oil-repellent dispersion.

8. Claims 1-8, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (US 6, 472, 019 B1) in view of Di Giaimo (US 3, 496, 134).

The discussion with respect to Yamaguchi et al in paragraph 7 is incorporated herein by reference.

The prior art of Yamaguchi et al is silent with respect to hydrochloric acid-trapping compound.

However, Di Giaimo teaches that the well recognized sensitivity of polyvinyl chloride i.e. halogen containing polymers to light and heat is dealt with by the addition of heat or light stabilizers. Conventional heat stabilizers are sodium carbonate, barium stearate which reads on the metal salt of an acid of claim 5 and an organic epoxy hydrochlorophyl (column 1, lines 39-43, lines 49-50) such as epoxidized soybean oil (column 3, line 1-2). Heat or light stabilizers read on the hydrochloric acid-trapping compound of instant invention. Therefore, it would have been obvious to one skilled in the art at the time invention was made to add heat or light stabilizers to halogen containing polymers to prevent from degradation because of their sensitivity to light.

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9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (US 6, 472, 019 B1) in view of Greenspan et al (US 2, 684, 353) or Yamaguchi et al (US 6, 472, 019 B1) in view of Di Giaimo (US 3, 496, 134) independently, as applied to claim 8 above, and further in view of Snyder (US 3, 617, 188).

The discussion with respect to Yamaguchi et al in view of Greenspan et al and Yamaguchi et al in view of Di Giaimo in paragraph 7 and 8 respectively is incorporated herein by reference.

The prior art is silent with respect to three different nonionic surfactants.

However, Snyder teaches a mineral oil composition in conjunction with other compositions such as those which impart permanent press and water-repellency characteristics to a textile material (abstract). The selection of a suitable emulsifying agent for forming the emulsion concentrate is dependent on the method by which the mineral oil is applied to the textile material. In general preferred emulsifiers are nonionic. It has been found that the **desired stability can be achieved by using a blend of different nonionic emulsifiers**.


Therefore, it would have been obvious to one skilled in the art at the time invention was made to use a blend of three different nonionic emulsifiers to obtain the desired stability.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karuna P. Reddy whose telephone number is (571) 272-6566.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Karuna P Reddy  
Examiner  
Art Unit 1713

  
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